P2 Innovative Coatings and Coating Equipment Stakeholder Meeting Summary for October 30, 1997

SUMMARY

SECOND ETV STAKEHOLDER MEETING

ORGANIC COATINGS AND APPLICATION EQUIPMENT

Concurrent Technologies Corporation (CTC), Johnstown, PA; October 30, 1997

Summary

Brian Schweitzer opened the meeting and made a few comments about the high-volume, low-pressure (HVLP) spray equipment vendor meeting (October 29, 1997). Mike Kosusko presented an update of the overall ETV program. Brian Schweitzer followed with a presentation on the status and accomplishments to date of the Environmental Technology Verification Program's Coatings and Coating Equipment Pilot (ETV CCEP). Significant comments from the meeting follow.

The environmental marketplace may need/value an EPA verification program. Innovative technologies cannot be considered when writing regulations unless they are already in use by some portion of the regulated industry. Hence, regulations tend to lag behind new technologies. If innovations are verified quickly, the new technology will be easier to implement. The cost of conversion to powder systems is the main obstacle preventing small job shops from installing powder systems. The verification process should include qualitative or relative cost statements with an emphasis on environmental issues. Verification testing should be conducted for emerging markets, not for established ones.

The target response time for releasing a Test Report and Verification Statement after testing begins is six months. Equipment vendor interest is present, but powder coating suppliers and vendors of other more established technologies may not perceive as much of a benefit and therefore may have less interest.

A competitive advantage is provided by Verification Statements. Although suppliers stand behind their products, the ETV program ensures that the products meet specifications under a standardized test protocol. The coating technology vendor has to realize a benefit exists in order to pay for testing.

More focus should be placed on the end user and his needs by identifying more stakeholders to represent the end user. Many vendors claim verification is unnecessary, but end users have expressed interest. Trade associations may be the voice for end users. Small end users face challenges (money and time) in getting involved as stakeholders.

Also, many small end users are resistant to change. New EPA regulations may persuade end users to get involved.

Because the powder coating formulations are customized for each application, a verification may not offer an advantage for powder coating. If powder coatings are treated as generic groups instead of as individual products, some vendors may reap benefits without paying for the testing. Also, different formulations may have different emissions.

For powder coatings and other more established technologies, the main emphasis should be HAP/VOC emissions testing. Other tests should be secondary.

Discussion Highlights

Protocol Development: Craig Fox presented the status of the development of the HVLP and powder coating protocols. Key points from the discussion follow.

Although this program is for "environmental" verification of individual products, the results will be publicly available and individuals cannot be stopped from comparing the Verification Statements of different vendors. The EPA is not liable if a vendor's performance is unsatisfactory for the verification. The vendor must agree to the Test and Quality Assurance Project Plan (TQAPP) as a condition of undergoing testing. However, the vendor must agree whether the Verification Statement will be posted on the Web site. Regardless of performance, an EPA report of the full results of testing will be publicly available. In addition, no end user would purchase a product solely based on the Verification Statement.

General Definitions/Conditions of the Protocol are:

- During testing five runs are conducted under the same conditions to economically establish repeatability of the test results.
- Critical and non-critical parameters refer to whether parameters are varied during testing, not on the importance of the parameter to coating quality and performance. Critical parameters are varied during testing; non-critical parameters are held constant during testing.
- The film thickness target should be identified in the TQAPP, based on the coating manufacturer recommendation and obtaining a quality finish.
- Standardization and certainty of performance should be explained.
- Operability refers to the ease of system operation.
- Maintenance issues should be measured and noted during testing.
- The vendor should have the option of having a cost analysis conducted at an additional cost.
- Health and safety issues, other than those covered by environmental issues, should be contained within the protocols.

HVLP Equipment Protocol: HVLP is 10 psi tip pressure, and a reciprocating gun is needed for testing.

Powder Coating Protocol: More thinking is required. HAP/VOC emissions and pretreatment issues require further evaluation.

Liquid Coating Protocol: UV-curable and supercritical CO2 coatings are innovative technologies, while waterborne and high solids are more established technologies. Suggest testing UV-curable coatings with wood or plastic substrates. Wood seems to be more desirable for testing. UV-curable coatings stand the most to gain from ETV.

Other New Technologies Proposed for Possible Verification Testing, Although Not Within the Scope of ETV:

- Total enclosed coating operations
- Total oxidation

Verification Statements: Environmental Impact should be the first thing mentioned in the statement. Currently mentioned after the background.

Next Solicitation: UV-curable coatings?

Equipment?:

- Another powder or liquid?
- Combination of equipment and coating?

New Stakeholders:

- Sales/marketing personnel
- Trade associations - small businesses
- NPCA - Small Trades Federation (for MACT standards), self sufficient focus groups
- Vendors
- Communicate with stakeholders via electronic means. Submit comments through Web site? Email? File transport protocol (FTP) for document review?

Next Meeting: Craig Fox will identify possible dates. Rad Tech ’98 is an option.

Attendees

Name	Affiliation

Dr. Alexander Ross	Rad Tech International
Dr. Mike Visilik	Electrotechnology Application Center
William Johnson	US EPA
Eugene Praschan	American Automobile Manufacturers Association (AAMA)
Dr. John Raschko	Massachusetts Office of Technical Assistance (MA OTA)
Andrew Sokol	UV Coatings Limited
Rick Klein	Iowa Waste Reduction Center
Loren Anderson	PPG Industries
Carl Izzo	Consultant
Mike Kosusko	US EPA
Craig Fox	MTS Technologies
Steve Williams	CF Kaiser International
Mark Wayner	Pennsylvania Department of Environmental Protection (PA DEP)
Chris White	MTS Technologies
Lynn Summerson	CTC
Rob Fisher	CTC
Vicki Miller	CTC
Bill Sharpe	US Army ARDEC
Brian Schweitzer	CTC